

# KINETIC RECOVERY IN CONGENITAL HIP DYSPLASIA

Liviu Alexandru TRAILA<sup>1</sup>

**Abstract:** *The congenital hip dysplasia is a childhood condition that can result in abnormal development of etiology of the hip. The aim of this work is to evaluate the application of systematic methods and physiotherapeutic procedures, to restore functional capacity reduced, or lost, in the case of patients diagnosed with congenital dislocation of hip. In the range 01.08.2014-01.08.2015 it has conducted a study on a lot of 12 children-9 girls and 3 boys, between the ages of 6 months and 3 years. The results were very good if you said the diagnosis before the age of 2 years. Antenatal prophylaxis during pregnancy and the newborn is particularly important. Early detection of the disease leads to healing without after-effects. Regardless of treatment, overlapping treatment applied classical kinetic undeniably lead to superior results.*

**Key words:** *hip dysplasia, sprain, evaluation.*

## 1. Introduction

The congenital hip dysplasia is a childhood condition that can result in abnormal development of etiology of the hip femoral epiphysis is not securely fixed at the level of the iliac bone, this allows the femur to slip partially or totally, uni-or bilateral outside acetabulum (dislocation). It is discovered by Mark Ortolani (flexion of ME and spread your knees as a "crackment" femoral head enters the cotil) [3].

The incidence of the disease is in Romania, 1 in 1000 births. The incidence is higher in girls than in boys, about 1 to 7, and the left hip is more commonly affected than the right, for reasons unknown [4].

## 2. Objectives

The aim of this work is to evaluate the application of systematic methods and physiotherapeutic procedures, to restore functional capacity reduced, or lost, in the case of patients diagnosed with congenital dislocation of hip. Assessment of patients has been pursued in the context of a complex program, individualized, depending on the stage of damage, age, gender, origin environment and stage of evolution of the disease. Objectives had as a means of achieving: relaxation, fighting inflammation, joint mobility and muscle force, education or re-education of walk [2].

Kinetotherapeutic treatment goals were [1].

- 1) restoration of mobility through retraining all movements at the hip, flexion, adduction, and external rotation;

---

<sup>1</sup> University of Craiova, Faculty of Physical Education and Sport.

2) restoring muscular strength :

- his butt big, wide middle tensor fascia (as muscle of orthostatism );
- trohanterieni muscles (external rotators), for posterior stability (falling) and the fixing of the femoral head in cotil;
- flexori muscles ;
- internal rotator muscles involved in mobilizing the hip to walk away.

3) restoring stability, controlled movement and ability.

Medical program of exercises was settled on 2 factors:

- the severity of congenital hip dysplasia (degree of stability);
- age at the beginning of treatment.

### 3. Material and Methods

In the range 01.08.2014-01.08.2015 it has conducted a study on a lot of 12 children-9 girls and 3 boys, between the ages of 6 months and 3 years, with diagnosis of congenital dislocation of hip, chosen randomly, diagnosed in the County Hospital in Drobeta Tr. Severin.

The aim of this study was to obtain stability. Hip mobility growth and increased muscle tone through a programme of gymnastics in patients diagnosed with congenital hip dislocation, closed reduction after the sprain.

Kinetic treatment began after reducing elbow dysplasia using abduction pants that allow the movement of your feet for 6-8 weeks until 5-6 months for mild sprains, the age limit for this treatment being 8-10 months.

Kinetotherapeutic programme included a set of exercises that have been repeated 5 times per meeting, 2-3 daily sessions:

- the child is in supine; assistant secures with a hand basin, and with other running abduction with the grip level of the internal condyle of femur;
- he child is in supine; the Assistant shall be placed in the angle formed by the abduşă and thigh mass; with one hand secures the iliac not to stand up with the forearm and hand the other thigh, and supports the push, stressing the abduction;
- the child is in supine; assistant to catch the lower third of the thigh and rotates besides (knee is stretched).

Before meeting the physical therapy was performed "muscle warming" through procedures of thermotherapy, and after sitting on the massage was applied.

The study group was made up of children aged 6 months to 3 years.

*The distribution by age group*

Table 1

Age groups	Number of cases	Frequency [%]
0,5 – 1 year	7	58,33
1- 2 years	3	25,00
2 – 3 ani years	2	16,66
All	12	100

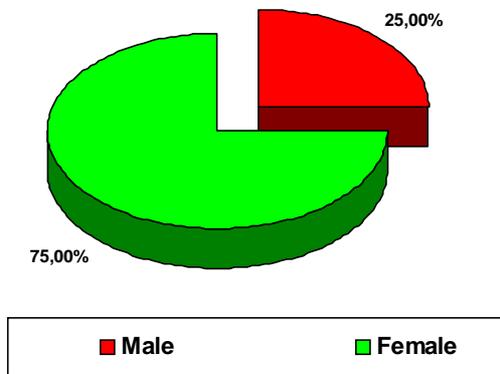


Fig. 2. *Group distribution according to sex*

The data in figure no. 2 and table 2 highlight the fact that morbidity from congenital hip dysplasia appears dominant in little girls, 75% versus 25% for boys.

**4. Results and Discussions**

At group studied, congenital hip dysplasia met mainly at right hip and left 6 cases 4 cases at the right hip.

*The incidence of the disease at group studied.*

Table 3

Articulation impairment	Number of cases	Frequency [%]
Congenital dislocation to left leg	8	66,67
Congenital dislocation to right leg	3	25
Congenital bilateral dislocation	1	8,33
All	12	100

Analyzing figure no. 3 and table 3, it can be noted higher incidence for congenital dislocation to left leg, certain 66,67%.

Congenital dislocation to right leg it appeared at 25% of cases and congenital bilateral dislocation at 8,33% of cases.

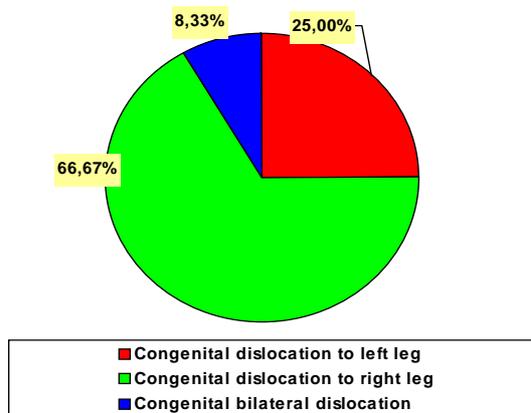


Fig. 3. *The type of damage to the joint group studying*

At group studied, after treatment and orthopaedic kinetoterapeutic, were obtained the following results (table 4):

- 83.33%) patients (10 had a good evolution, with healing without after-effects ;
- 2 patients (16.67%) had a good following the reduction of bleeding.

*The evolution of the disease in patients from the studied group. Table 4.*

The progress of disease	Number of cases	%
Very good evolution	10	83,33
Good evolution	2	16,66
All	10	100

## 5. Conclusions

Antenatal prophylaxis during pregnancy and the newborn is particularly important. Early detection of the disease leads to healing without after-effects.

Detection of late, after the age of 2-3 years of the child, leading to an orthopedic and surgical treatment and its possible sequelae.

Regardless of treatment, overlapping treatment applied classical kinetic undeniably lead to superior results.

At group studied, congenital hip dysplasia met mainly at left hip 66.67%, compared to 25% and the right balance of bilateral 8.33%.

The incidence of the condition is dominant to women 75%, compared to 25% for males.

The congenital hip dysplasia is a childhood disorder caused by abnormal development of the hip joint.

Congenital hip dysplasia is usually on physical examination diagnosis. All new babies are examined for congenital dislocation of the hip still birth.

Clinical manifestations vary depending on child's age, the degree of displacement of the femoral head (subluxabil, event or dislocated) and depending on when the deployment has occurred (prenatal,

perinatal or postnatal). With as your child grows, the clinical findings of a dislocation of hip treated become more evident

If the detection is done in the neo-natal period, reduction is easy; keeping the items in the normal ratios for several weeks is sufficient for capsuloligamentare elements to return to their normal configuration and right hip to gain stability.

The exact causes of congenital hip dislocation are unknown. The association of risk factors multiply the risk malformation dislocation existence.

## References

1. Icleanu, I., Cordon, M.: *Treatment of Hip Dysplasia*. In: Management Intercultural, Volume XVII, 2015, Nr. 2 (34) p. 347 – 353.
2. Jianu, M.: *Vademecum Surgery and Pediatric Orthopedics*. Bucureşti. Publisher Medicală Bucureşti, 2002.
3. Marcu, V., Dan, M., Pasztai, Z.: *Kinetoterapie/ Physiotherapy*. Oradea. Publisher University of Oradea, 2006.
4. Traila, L.A.: “The Functional Role of Kinetotherapy for Congenital Hip Dysplasia”. In: *International Congress and exhibition on kinetotherapy with International Participation*, Căciulata, 2011, p. 45-52.